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7590	02/18/2005		EXAMINER	
Barton E. Showalter Baker Botts L.L.P. 2001 Ross Avenue Dallas, TX 75201-2980			KADING, JOSHUA A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/746,150	DICK ET AL.
Examiner	Art Unit	
Joshua Kading	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 January 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-9, 11-20, 22-27 and 29-47 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-9, 11-20, 22-27, 29-38, and 40-47 is/are rejected.

7) Claim(s) 39 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

5

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

10 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15 Claims 1-6, 9, 11-17, 20, 26, 27, 29-31, 33-38, 44, and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Combs (U.S. Patent 5,666,516).

Regarding claim 1, Combs discloses “a communication system, comprising: a central processor (figure 1A-2 element 30); a signal processor (figure 1A-2 element 32 which contains the signal processor as seen in figure 4, element 74 and the CPU element 30); a first communication bus forming a first path of communication between the central processor and the signal processor (figure 1A-2 where there is a data bus carrying data between the CPU and signal processor in element 32); a second communication bus forming a second path of communication between the central processor and the signal processor (figure 1A-2 where there is a control buss carrying

control information between the CPU and signal processor in element 32); wherein the central processor is operable to transmit and receive data packets using the first communication bus (figure 1A-2 the data bus is for data information); and wherein the central processor is further operable to transmit and receive control packets using the 5 second communication bus (figure 1A-2 the control bus is for control information)."

Claim 11 has limitations similar to those of claim 1. Therefore, the limitations corresponding to those of claim 1 are rejected for the same reasons as in claim 1.

10 Regarding claims 2, 12, and 13 Combs discloses "a plurality of terminal units (figure 1A-2 where elements 22, 16 and the lines to speakers and microphone represent terminal units); a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the operation of a respective one of the plurality of terminal units (figure 4, elements 72, 70, 15 68 are all associated with control of the terminal units and coupled to the CPU through bus 61); a script module coupled with at least one of the terminal unit control modules (figure 4, element 76 which contains script (program) instructions for use by the DSP as disclosed in col. 32, lines 40-51); and wherein the script module is operable to determine the content of the control packets (col. 32, lines 40-51 where the control 20 packets are sent to element 76 and decoded/translated to their opcodes for use by the DSP)."

Regarding claims 5 and 16, Combs discloses "a plurality of terminal units (figure 1A-2 where elements 22, 16 and the lines to speakers and microphone represent terminal units); a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the 5 operation of a respective one of the plurality of terminal units (figure 4, elements 72, 70, 68 are all associated with control of the terminal units and coupled to the CPU through bus 61); a terminal unit behavior script module coupled with at least one of the terminal unit control modules, the terminal unit behavior script module defining a plurality of subroutines available to at least one of the terminal units (figure 4, element 76 which 10 contains script (program) instructions for use by the DSP to process information used by the terminal units as disclosed in col. 32, lines 40-51); and wherein the control packets include information corresponding with at least one of the subroutines (col. 32, lines 40-51 where the control packets are sent to element 76 and decoded/translated to their opcodes for use by the DSP)."

15

Regarding claims 6 and 17, Combs discloses "a plurality of terminal units (figure 1A-2 where elements 22, 16 and the lines to speakers and microphone represent terminal units); a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the 20 operation of a respective one of the plurality of terminal units (figure 4, elements 72, 70, 68 are all associated with control of the terminal units and coupled to the CPU through bus 61); a terminal unit subroutine library coupled with at least one of the terminal unit

control modules, the terminal unit subroutine library defining a plurality of commands associated with subroutines available to at least one of the terminal units (figure 4, element 76 which contains subroutines (programs) for use by the DSP to process information used by the terminal units as disclosed in col. 32, lines 40-51); and wherein

- 5 the control packets include information corresponding with at least one of the commands (col. 32, lines 40-51 where the control packets are sent to element 76 and decoded/translated to their opcodes for use by the DSP)."

Regarding claims 9 and 20, Combs discloses "a voice and data module coupled

- 10 with the central processor (figure 1A-2, element 38); and wherein the voice and data module is operable to determine the content of the data packets (col. 7, lines 36-41 where the module 38 is capable of determining whether the incoming data content is video or audio)."

- 15 Regarding claim 44, Combs discloses "wherein each of the central processor, the signal processor, the first communication bus, and the second communication bus are disposed within a common enclosure of a single device (figure 1A-2, element 12)."

Regarding claim 46, Combs discloses "wherein the signal processor comprises a

- 20 Digital Signal Processor (DSP) (figure 4, element 74)."

Regarding claim 3, Combs discloses "a communication system comprising: a central processor operable to transmit data packets and control packets (figure 1A-2 element 30); a transmit/receive module operable to receive the data packets and the control packets and transmit the data packets and control packets to one of a plurality of terminal units (figure 1A-2 element 32 where the terminal units are elements 16, 22, and speakers, microphone); a communication bus coupling the central processor to the transmit/receive module for communication of the data packets and the control packets (figure 1A-2 where the communication consists of control, address, and control information); a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the operation of a respective one of the plurality of terminal units (figure 4, elements 72, 70, 68 are all associated with control of the terminal units and coupled to the CPU through bus 61); a script module coupled with at least one of the terminal unit control modules (figure 4, element 76 which contains script (program) instructions for use by the DSP as disclosed in col. 32, lines 40-51); wherein the script module is operable to determine the content of the control packets (col. 32, lines 40-51 where the control packets are sent to element 76 and decoded/translated to their opcodes for use by the DSP); and wherein the script module defines a plurality of states available to at least one of the terminal units, and the control packets include control information corresponding with at least one of the states (col. 32, lines 20-39 where the DSP is controlled by a state corresponding to information on the DMA channel which, given the function of the DSP

and how it relates to the terminal units, corresponds with control information for the terminal units).

Regarding claim 4, Combs discloses "a communication system, comprising: a

- 5 central processor operable to transmit data packets and control packets (figure 1A-2 element 30); a transmit/receive module operable to receive the data packets and the control packets and transmit the data packets and control packets to one of a plurality of terminal units (figure 1A-2 element 32 where the terminal units are elements 16, 22, and speakers, microphone); a communication bus coupling the central processor to the
- 10 transmit/receive module for communication of the data packets and the control packets (figure 1A-2 where the communication consists of control, address, and control information); a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the operation of a respective one of the plurality of terminal units (figure 4, elements 72, 70,
- 15 68 are all associated with control of the terminal units and coupled to the CPU through bus 61); a script module coupled with at least one of the terminal unit control modules (figure 4, element 76 which contains script (program) instructions for use by the DSP as disclosed in col. 32, lines 40-51); wherein the script module is operable to determine the content of the control packets (col. 32, lines 40-51 where the control packets are sent to
- 20 element 76 and decoded/translated to their opcodes for use by the DSP); and wherein the script module defines a plurality of subroutines available to at least one of the terminal units, and the control packets include control information corresponding with at

least one of the subroutines (col. 32, lines 40-51 where the programs are subroutines used in conjunction with the terminal units and as stated in col. 31, lines 61-67 the instructions of the subroutines are sent as control packets)."

5 Regarding claim 14, Combs discloses "the script module defines a plurality of states available to at least one of the terminal units, and the control packets include control information corresponding with at least one of the states (col. 32, lines 20-39 where the DSP is controlled by a state corresponding to information on the DMA channel which, given the function of the DSP and how it relates to the terminal units, 10 corresponds with control information for the terminal units)."

Regarding claim 13, Combs discloses "the script module defines a plurality of subroutines available to at least one of the terminal units, and the control packets include control information corresponding with at least one of the subroutines (col. 32, 15 lines 40-51 where the programs are subroutines used in conjunction with the terminal units and as stated in col. 31, lines 61-67 the instructions of the subroutines are sent as control packets)."

Regarding claim 36, Combs discloses "a system, comprising: means for 20 transmitting first control packets from a first terminal unit control module coupled with a central processor to a signal processor over a first communication bus, wherein the first communication bus forms a first path of communication between the central processor

and the signal processor (figure 1A-2 elements 30 and 32 where element 32 is further shown in figure 4 with a signal processor, the terminal unit control modules are 68, 70, and 72 and control bus transmits the control information between the CPU and signal processor); means for transmitting second control packets from a second terminal unit

- 5 control module coupled with the central processor to the signal processor over the first communication bus (figure 4 elements 68, 70, and 72 control modules which are connected the control bus used for transmitted control packets); the first and second terminal unit control modules operable to control at least partially the operation of a first and a second terminal units, respectively (figure 4, elements 72, 70, 68 are all
- 10 associated with control of the terminal units and coupled to the CPU through bus 61); and means for transmitting data packets from a the central processor to the signal processor over a second communication bus, wherein the second communication bus forms a second path of communication between the central processor and the signal processor (figure 1A-2 where the CPU and element 32 are connected by a data bus
- 15 which acts as the second communication bus)."

Although claim 26 is a method and claim 33 is a computer program, the same limitations as described in claim 36 are present in claims 26 and 33. Therefore, claims 26 and 33 are rejected for the same reasons as in claim 36. Further for claim 33, the

- 20 computer program is disclosed by Combs in figure 1A-1, element 50.

Regarding claims 27, 34, and 37, Combs discloses "...transmitting at least a portion of the control packets from the signal processor to the first terminal unit (col. 34, lines 14-18)."

5 Regarding claims 29, 35, and 38, Combs discloses "...transmitting information regarding the content of the first control packets from a script module to the first terminal unit control module (figure 4, element 76 acts as the script module and is connected to the signal processor which will use the information in element 76 to send information to the terminal units such as the case in col. 34, lines 14-18)."

10

 Regarding claim 30, Combs discloses "transmitting terminal unit subroutine identifiers from a terminal unit behavior script database to the script module (figure 4, element 76 acts as the behavior script module in that it contains the scripts used by element 74 and is connected to the signal processor which will use the information in element 76 to send information to the terminal units such as the case in col. 34, lines 14-18)."

15 Regarding claim 31, Combs discloses "transmitting at least one subroutine from a terminal unit subroutine module to the script module (figure 1A-1, element 50 contains all the appropriate subroutines for operation of the system, including that of the terminal units, the operation of the script module 74 in conjunction with the signal processor as read in col. 34, lines 14-18)."

Claims 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al. (U.S. Patent 5,475,681).

5 Regarding claim 22, White discloses "a terminal unit, comprising:
a printed circuit board disposed within the terminal unit (figure 1, element 109
where IC signifies a printed circuit board; further it should be noted that if "a terminal
unit" comprises "a printed circuit board", it is inherent that it is disposed within the
terminal unit, if it wasn't then the terminal unit wouldn't comprise a printed circuit board);
10 a processor coupled with the printed circuit board, the processor operable to
receive control packets from one of a plurality of terminal unit control modules
associated with a communication system (figure 1, element 107; col. 4, lines 41-48)."

15 Regarding claim 23, White discloses "the terminal unit of Claim 22, wherein the
processor is further operable to receive data packets from the communication system
(col. 4, lines 41-48 by the processor having access (input and output) to the system it is
able to receive packets from the system)."

20 Regarding claim 24, White discloses "the terminal unit of Claim 22, further
comprising a command interpreter coupled with the processor, the command interpreter
operable to receive commands associated with the control packets, and to control

hardware components of the terminal unit (figure 2, element 206 which is part of element 109 which is coupled to the processor; col. 4, lines 59-63)."

Claim Rejections - 35 USC § 103

5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15 Claims 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Combs.

Regarding claim 40, Combs discloses the system of claim 1. However, Combs does not explicitly disclose "the first communication bus is a time-division multiplexed bus." Although Combs does not explicitly state the type of bus used for the first communication bus, it would have been obvious to one with ordinary skill in the art at the time of invention to have the first communication bus be a time-division multiplexed bus as a matter of design choice. It is well known that buses can be of several types, including a time-division multiplexed bus and the choice of what kind of bus to use is dictated by the designer and the design of the system. A motivation for using a time-division multiplexed bus, as is known in the art, is to provide a way of sharing the bus

among several different competing devices so that a "fair" scheme is developed to allow access to the bus.

Regarding claims 41 and 42, Combs discloses the system of claim 40. However,

5 Combs does not explicitly disclose what type of bus the second communication bus consists of, i.e. "a Host Port Interface bus" or "an asynchronous communication bus". Although neither the HPI bus nor the asynchronous bus are disclosed, it would have been obvious to have the second communication bus consist of one of these (or others) types of buses as a matter of design choice. As with the first communication bus, the
10 type of bus chosen is a preference of the designer and of the system design. Therefore, whether the bus is an HPI bus or an asynchronous bus is design preference. The motivation for choosing a type of bus for the second communication bus is the same as that for claim 40.

15 Regarding claim 43, Combs discloses the system of claim 40. Although Combs does not explicitly disclose the time-division multiplexed bus of claim 40, Combs does further discloses "the second communication bus is operable to transmit control packets between the central processor and a digital signal processor (DSP) (figure 1A-2, elements 30, 32, and the control bus used to connect them where there is a DSP in
20 element 32 as shown in figure 4, element 74)." It would have been obvious to one with ordinary skill in the art to include the second communication bus sending control packets between the CPU and DSP for the same reasons and motivation as in claim 40.

Claims 7, 8, 18, 19, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Whitridge et al. (U.S. Patent 6,119,179).

5 Regarding claims 7 and 18, Combs discloses "a plurality of terminal units (figure 1A-2 where elements 22, 16 and the lines to speakers and microphone represent terminal units); a plurality of terminal unit control modules coupled with the central processor, each terminal unit control module operable to control at least partially the operation of a respective one of the plurality of terminal units (figure 4, elements 72, 70, 10 68 are all associated with control of the terminal units and coupled to the CPU through bus 61)... " However, Combs lacks what Whitridge discloses, "a terminal unit attribute repository coupled with the terminal unit control modules (figure 4, element 11 is the terminal unit, element 20g is the attribute repository coupled with a terminal control module 16a); and wherein the attribute repository includes attributes associated with at 15 least one of the terminal units (col. 3, lines 43-50 where the attributes associated with the terminal unit is the phone book)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the repository with attributes for the purpose of allowing the user to use the terminal unit as a cordless telephone. The motivation for allowing a user to use a cordless telephone is so that the user can freely 20 move about without wires or cords getting in the way.

Regarding claims 8 and 19, Combs and Whitridge disclose the systems of claim 7 and 18. However, Combs lacks what Whitridge further discloses, "wherein the attributes include a speed dial telephone number, or a personal phone book entry (col. 3, lines 43-50)." It would have been obvious to one with ordinary skill in the art to

5 include the phone book entry for the same reasons and motivation as in claims 7 and 18.

Regarding claim 32, Combs discloses "the method of claim 26. However, Combs lacks what Whitridge discloses, "coupling a terminal unit attribute repository to the central processor (figure 4, element 11 is the terminal unit, element 20g is the attribute repository coupled with a terminal control module 16a); and storing information regarding attributes of the first terminal unit at the terminal unit attribute repository (col. 3, lines 43-50 where the attributes associated with the terminal unit is the phone book)." It would have been obvious to one with ordinary skill in the art at the time of invention to

10 include the repository with attributes for the purpose of allowing the user to use the terminal unit as a cordless telephone. The motivation for allowing a user to use a cordless telephone is so that the user can freely move about without wires or cords getting in the way.

20 Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. in view of Kruse et al. (U.S. Patent 5,463,616).

Regarding claim 25, White discloses "the terminal unit of Claim 22." White lacks "a compressor and decompressor module coupled with the processor and operable to receive data packets from the processor and convert the data packets into voice packets; a codec coupled with the compressor and decompressor, the codec operable

5 to receive voice packets from the compressor and decompressor for transmission to a speaker associated with the terminal unit." However, Kraus discloses "a compressor and decompressor module coupled with the processor and operable to receive data packets from the processor and convert the data packets into voice packets (figure 10, element 242 acts as the processor and element 240 acts as the compressor and

10 decompressor by taking the voice data and compressing and decompressing it into the appropriate packets as can be read in col. 11, lines 12-16); a codec coupled with the compressor and decompressor, the codec operable to receive voice packets from the compressor and decompressor for transmission to a speaker associated with the terminal unit (figure 10, element 238)." It would have been obvious to one with ordinary

15 skill in the art at the time of invention to include the compressor and decompressor and the codec with the terminal unit of claim 22 for the purpose of having concurrent voice and non-voice communications over a network. The motivation being that having both types of communication allows for greater access, via a communication network, to people all over the world (col. 1, lines 47-49).

20

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Malek et al. (U.S. Patent 5,666,366).

Regarding claim 45, Combs discloses the system of claim 44. However, Combs lacks what Malek discloses, "the single device provides an interface between an digital subscriber line (DSL) communication network and a plurality of wireless telephone handsets (Abstract, lines 3-8 where the DSL modem is as shown in figure 3, element 96 with wireless technology element 103)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the DSL link with the wireless handsets for the purpose of synchronizing the handsets (Malek, col. 8, lines 55-65). The motivation for synchronizing handsets is so that communication between the handsets and base station can take place, if the handsets are not synchronized communication will be "off" and the data will not transmitted/received properly.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Holmes et al. (U.S. Patent 5,506,932).

Regarding claim 47, Combs discloses "a voice and data module coupled with the central processor (figure 1A-2, element 38)..." However, Combs lacks what Holmes discloses, "wherein the voice and data module is operable to receive asynchronous data packets and convert the asynchronous data packets to synchronous data packets for transmission over the first communication bus (col. 5, lines 13-22 where the audio (voice) and video (data) information arrives in an asynchronous fashion, the module then uses the voice and data information to synchronize the two and produce a synchronized data stream)." It would have been obvious to one with ordinary skill in the art at the time of invention to have the asynchronous data synchronized for the purpose

of "aligning" the video with the audio of prerecorded data. The motivation for aligning the video and audio is so that playback is true to how it was recorded.

Allowable Subject Matter

5 Claim 39 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10 Applicant's arguments filed 28 January 2005 have been fully considered but they are not persuasive.

15 Applicant argues that all rejections using U.S. Patent 5,666,516 Combs is improper because Combs does not disclose the control bus transmitting and receiving control packets. Rather, Combs teaches the transmitting and receiving of control signals. The examiner respectfully disagrees.

20 Although applicant is correct in asserting that a signal is not a packet, a packet, by its basic definition of a series of bits in a given order, is a series of signals (bits) in fixed positions sent across a communication medium, such as a bus. Since Comb discloses that at least a portion of the control bus is made up of GPIO signals (col. 5, lines 49-53), one of ordinary skill in the art would recognize that the control bus of Comb, consisting of these different bit lines, is transmitting a control packet in the form of these GPIO signals taken as a whole.

It should be further noted that the entire bus (all bit lines) can be seen as transmitting a control packet in parallel form instead of the usual serial form because each bit line is a signal and all bit lines taken together form a control bus packet.

U.S. Patent 6,633,947 B1, Holman et al. supports the contention that packets
5 can be made of signals, see figure 3, and col. 5, Table 1.

In addition, Combs further discloses that I/O controllers do in fact send packets to indicate various commands inputted by these controllers (col. 6, lines 13-26). This means that it is completely in the realm of possibility for Combs to transmit packets of data, not only on the data bus, but also on the control bus. Therefore, whether the
10 control packets are made of signals, bits, or commands from an interface, they are all types of control packets used to control the function of the system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time
15 policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the
20 shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

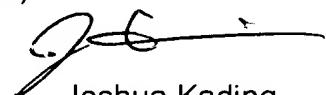
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

5 examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

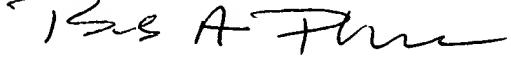
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should 15 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

20 February 14, 2005



BOB PHUNKULH
PRIMARY EXAMINER